

Machine Id **22887** Component **Diesel Engine** Fluid **PETRO CANADA DURON SHP 10W30 (--- GAL) RECOMMENDATION**

The oil is near the end of it's useful service life, recommend schedule	
an oil change. Resample at the next service interval to monitor.	

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		PCA06147167	PCA05197710	
schedule	Sample Date		Client Info		13 Apr 2024	06 Mar 2021	
tor.	Machine Age	mls	Client Info		0	0	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				ABNORMAL	NORMAL	
	Iron	ppm	ASTM D5185m	>100	11	7	
	Chromium	ppm	ASTM D5185m	>20	0	<1	
	Nickel	ppm	ASTM D5185m	>4	0	<1	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	5	2	
	Lead	ppm	ASTM D5185m	>40	0	<1	
	Copper	ppm	ASTM D5185m	>330	4	3	
	Tin	ppm	ASTM D5185m	>15	0	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
			40TH D=:05			4.6	
	Silicon	ppm	ASTM D5185m	>25	14	10	
ination in	Potassium	ppm	ASTM D5185m	>20	<1	1	
	Fuel	%	ASTM D3524	>5	1.8	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method	2	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	11.7	13.5	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	25.6	24.2	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Sodium	nnm	ASTM D5185m		2	3	
onfirm oil	Boron	ppm ppm	ASTM D5185m	2	2 16	12	
	Barium		ASTM D5185m	2	0	0	
	Molybdenum	ppm ppm	ASTM D5185m	50	45	58	
	Manganese	ppm	ASTM D5185m	0	45 6	1	
	Magnesium			950	740	864	
	Calcium	ppm	ASTM D5185m	950 1050	740 811	1063	
		ppm	ASTM D5185m				
	Phosphorus	ppm	ASTM D5185m	995	645 760	883	
	Zinc	ppm	ASTM D5185m	1180	769	1163	
	Sulfur	ppm	ASTM D5185m	2600	2782	2620	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	20.4	

Base Number (BN) mg KOH/g ASTM D2896

Visc @ 100°C cSt

CONTAMINATION

All component wear rates are normal.

WEAR

Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

The oil viscosity is lower than normal. The BN level is low. Confirm oil type.

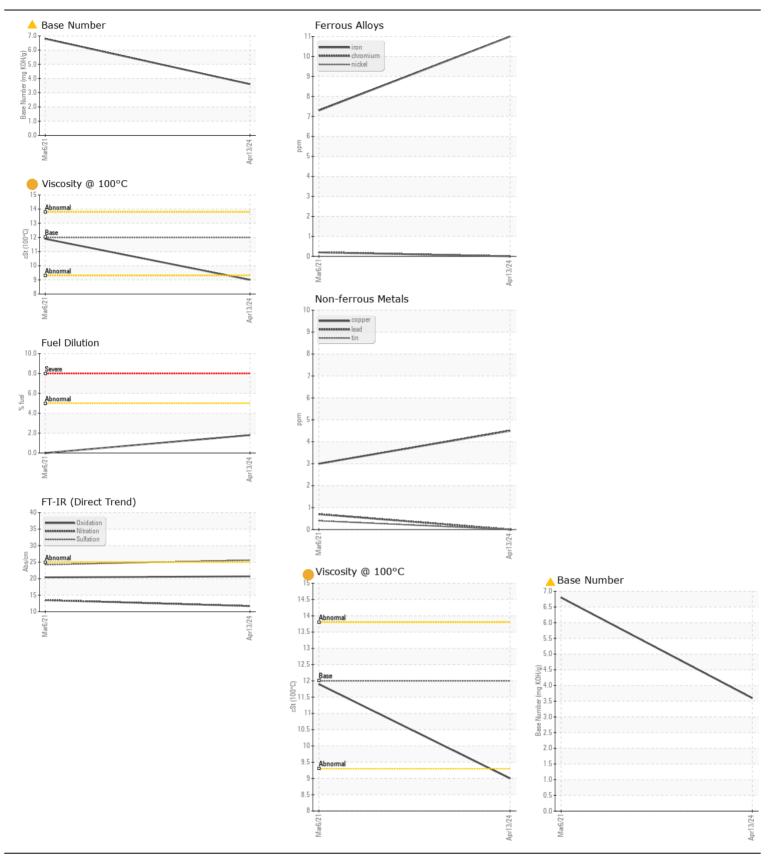
6.8

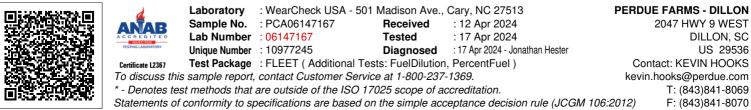
11.9

A 3.6

9.0

ASTM D445 12.00





Contact/Location: KEVIN HOOKS - PERDILSC Page 2 of 2